DEPARTMENT OF THE INTERIOR

U.S. GEOLOGICAL SURVEY

Comprehensive Bibliographies on Mineralized and Unmineralized Layered Mafic Intrusions in the United States

Ву

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Open-File Report 86-589-A

Prepared in cooperation with IGCP Project 161.

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These bibliographies have been compiled at the U.S. Geological Survey, Menlo Park, California, under the auspices of Project 161 of the International Geological Correlation Program, entitled "Sulfide Deposits in Mafic and Ultramafic Rocks." Part of a series of bibliographies being compiled for the entire world, they are considered to be complete through October 1986.

Compilation of the bibliographies was begun by searching the computerized data bases of scientific literature referred to as GeoRef (American Geological Institute) and CA Search (Chemical Abstracts), using two search strategies:

A + (B or C or D or E) + F

or

G + F

where

A = nickel or cobalt or platinum or pentlandite

B = mineralization or ore deposit or dissemination or mine

C = ultramafic or ultrabasic or dunite or peridotite or harzburgite

D = gabbro or anorthosite or norite

E = economic geology

F = a geographic region, and

G = layered intrusion or cumulate

Specifically excluded from the bibliography on mineralized occurrences are references relating to laterites or to Ni, Cu, or Pt-group-element mineralization associated with other than mafic igneous rocks. Thus, many of the references cited by Henry Cornwall in U.S. Geological Survey Bulletin 1223 have been excluded. References to mafic rocks considered to be ophiolitic in character are excluded from the bibliography on unmineralized layered mafic intrusions, as are references to anorthositic complexes (e.g., Adirondacks, Laramie, San Gabriel), differentiated hypabyssal sills (e.g., Palisades, Purcell), and innumerable occurrences of unmineralized noncumulate gabbroic rocks. The bibliography on unmineralized mafic intrusions complements that for known mineralization; it provides the researcher with contrast and the prospector with potential.

The Duluth Complex, Minnesota, and the Stillwater Complex, Montana, are given separate status in this contribution because references to them far outnumber those to other mafic rock complexes in the United States. The bibliography on the Duluth Complex and related Keweenawan intrusions includes all relevant references cited in Minnesota Geological Survey Bulletin 46, entitled "Bibliography of Minnesota Geology, 1951-1980." Many students of the Duluth Complex currently view it in the context of related intrusive and volcanic activity, and, indeed, of the broader midcontinental-rifting environment. In that spirit, we have attempted to include all relevant references.

The bibliography on the Stillwater Complex is an update of the comprehensive bibliography in Montana Bureau of Mines and Geology Special Publication 92, entitled "The Stillwater Complex, Montana: Geology and Guide." The bibliography presented here also cites contributions in Special Publication 92, several earlier references not cited in that publication, and many references published in 1985 and 1986. All citations in the bibliography on the Stillwater Complex have been carefully checked for accuracy and reflection of the authors' usage of capitalization, abbreviation, and punctuation. Havach's tireless scrutiny of the many draft copies and addenda to these bibliographies helped to ensure editorial consistency of citation stle.

We thank many individuals for helping make these bibliographies accurate and comprehensive. Especially noteworthy were the contributions of Lynn Swanson, Minnesota Geological Survey; Laurel Burns, Alaska Geological Survey; and Roger Cooper, Lamar State University (Texas).

Because large bibliographies on mafic intrusions in other parts of the world were being compiled concurrently, time has not been available for inspection and verification of many of the citations; for this we apologize. Users of the bibliography are encouraged to report any errors to Gerald K. Czamanske so that they may be corrected. In a similar spirit, users are encouraged to send notice of reports published before 1987 that have been inadvertently omitted.

This report is being issued in two forms, representing slightly differing versions. Version A, issued as paper copy, incorporates foreign diacritics. Version B, issued as an IBM-compatible diskette, affords users the great benefit of an online bibliography, but is formatted only in the standard ASCII character set.

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